REMARKS

By the above amendment, independent claims 5, 6 and 16 have been amended to clarify features of the present invention and claims 12 and 13 have been amended to correct informalities. Applicants submit that such amendments are of a clarifying nature and do not raise new issues requiring further search and/or consideration.

At the outset, applicants note that claims 5, 6 and 16 have been amended to clarify the features that in addition to storing actual images of defect candidates and data including location information of the defect candidates in memory, there is displayed on the screen, defect candidate data in a map format, as illustrated by the squares and rectangles shown in the map display portion 55 in Fig. 8 of the drawings of this application. Additionally, as recited in the claims and as now clarified, there is displayed on the screen a selected one of the stored actual images of the defect candidates, which is designated on the screen among the defect candidate data displayed in the map format on the screen. Although Fig. 8 does not illustrate the display of the actual image there is shown on the screen an image display portion 56 in Fig. 8. As shown, the current location symbol 59 is placed over one of the squares or rectangles, as shown in the map display portion 55, so that the defect candidate at such location is selected and the actual image of the selected defect candidate is displayed in the image display portion 56. Thus, the defect candidate data is displayed in the map format in portion 55 of the screen and the actual image of a selected one of the defect candidate data is simultaneously displayed in portion 56 of the screen. Applicants note that such features are clearly described at page 13, line 11 to page 14, line 1 of the specification in conjunction with Fig. 8. That is,

as described in this portion of the specification, referring to Fig. 8, the location on a substrate (wafer) of each detected defect is displayed on map display portion 55, which corresponds to defect map 207 of Fig. 4. Further, an image of a defect specified from among the defects displayed on the map display portion 55 is displayed on image display portion 56, which corresponds to image display means 209 of Fig. 4. Specifying a defect for displaying this image is effected by operating a mouse operation command 140 in that a current location symbol 59 is displayed on the screen using the mouse operation comments button 140 to select a selection mode 145 from among a selection mode 145 and a zooming mode 146, the current location display 59 is moved with the mouse, and the image of a defect that a user wishes to see is displayed on image display portion 56 by clicking on the location of the defect to be viewed. By the present amendment, independent claims 5, 6 and 16 have been amended to clarify such features.

The rejection of claims 3, 5, 6, 12 - 16 and 25 - 30 under 35 USC 103(a) as being unpatentable over Mizuno in view of Hardikar et al, and the rejection of claims 10, 11 and 20 - 24 under 35 USC 103(a) as being unpatentable over Mizuno in view of Hardikar and Gallarda, such rejections are traversed, insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

In applying Mizuno to the claimed invention, the Examiner has mischaracterized applicants arguments in relation to the description at column 6, lines 37 - 39 of Mizuno. More particularly, applicants have not argued that Mizuno does not display an actual image, but rather, that Mizuno does not disclose displaying on a screen in a map format, the defect candidate location data, and

additionally displaying on the screen a selected one of the stored actual images of the defect candidates which is designated on the screen among the defect candidate displayed in the map format on the screen, as now clearly recited in each of independent claims 5, 6 and 16 of this application. Column 6, lines 32 - 44 of Mizuno states:

> The means used for classifying the types and sizes of the defects is, for example, of a hardware configuration such as shown in portion A of FIG. 1. In other words, the elements shown in portion A carry out the above-described steps (12) and (13) of FIG. 3 (detailed in FIGS. 4 and 5). (emphasis added).

Thus, in order to classify defects in accordance with steps (12) and (13) of FIG. 3 of Mizuno, an SEM image for inspection is formed, as indicated in step (10), and a comparison is effected between the SEM image for inspection and a reference image, so as to detect a differing portion as indicated in step (11), as also shown in Fig. 4. Based upon this detected differing portion or defect, a classification is effected. Irrespective of whether or not Mizuno stores the SEM image in a memory 23, which is then read out for display, such process is utilized for extracting or determining a defect in accordance with the clear disclosure of Mizuno, and applicants submit that Figs. 6A and 6B of Mizuno disclose a result of the defect detection, wherein Fig. 6A shows the location data of defects in a map format and Fig. 6B additionally shows a classification of the defect, in addition to location data in a map format. However, Mizuno does not disclose or teach, irrespective of the Examiner's contentions, the recited features of claims 5, 6 and 16 that in addition to displaying on a screen in map format, defect candidate, a selected one of the actual images of the stored defect candidates, which is designated on the screen among the defect candidate data displayed in the map format on the screen is also

displayed on the screen. Thus, applicants submit that each of the independent claims and the dependent claims patentably distinguish over Mizuno in the sense of 35 USC 103 and all claims should be considered allowable thereover.

With respect to Hardikar et al, the Examiner apparently contends that this patent teaches that a map format is displayed at one portion of the screen and the displayed image of the defect candidate is simultaneously displayed at another portion of the screen referring to column 6, lines 8 - 36 and Fig. 6C thereof. (See prior office action of September 20, 2005). Contrary to the position set forth by the Examiner, while Fig. 6C of Hardikar discloses a wafer map, possibly representing defect candidate data, it is not seen that Hardikar et al discloses or teaches that in addition to displaying on a screen defect candidate data in map format, there is also displayed on the screen a selected one of the actual images of the stored defect candidates which is designated on the screen among the defect candidate data displayed in the map format on the screen. There is no disclosure in Hardikar et al of displaying an actual image of a defect candidate which is designated from among the defect candidate data displayed in the map format on the screen. While the Examiner refers to different criteria for a "killer defect", whatever such criteria may be, there is no disclosure or teaching in Hardikar et al of displaying a selected one of an actual image of the defect candidate from the defect candidate data displayed in map form on the screen which is designated. Thus, applicants submit that the combination of Hardikar and Mizuno fail to provide the claimed features as set forth in claims 5, 6 and 16 and the dependent claims of this application in the sense of 35 USC 103, and all claims should be considered allowable thereover.

With respect to the addition of Gallarda et al to the aforementioned proposed combination of references, whether or not Gallarda et al may be considered to disclose utilizing different thresholds for defect detection, Gallarda et al also fails to disclose or teach the features as recited in independent claims 5, 6 and 16 regarding display of defect candidate data in map format on the screen and additionally displaying an actual image of one of the defect candidates designated among the defect candidate data displayed on the screen in the map format. Thus, applicants submit that this proposed combination of references also fails to disclose or teach the claimed features of the independent and dependent claims of this application in the sense of 35 USC 103 and all claims should be considered allowable thereover.

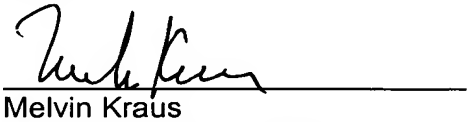
In view of the above amendments and remarks, applicants submit that all claims present in this application patentably distinguish over the cited art and should now be in condition for allowance. Accordingly, issuance of an action of a favorable nature is courteously solicited.

The Examiner is invited to contact the undersigned attorney to schedule an interview to resolve any outstanding issues, in order to place this application in condition for allowance.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing

of this paper, including extension of time fees, to Deposit Account No. 01-2135 (501.41125X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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